

Appendix A: Test Blueprint for 2005 MEAP

Creating a MEAP Mathematics Test

The MEAP Mathematics Assessment is based on the Michigan Grade Level Content Expectations (GLCEs), which have been categorized as Core, Extended Core, Future Core or Not Assessed at the State Level (NASL). Each form of the assessment includes a common set of three items (or points) per Core GLCE (maximum of 60 items), plus a matrix comprised of items that are Extended Core (one item per GLCE per form), Future Core (a random item from one item available per GLCE), Field Test (as needed) and Linking (5 Core GLCE items selected from each of the two adjacent grade assessments).

Each form consists of three parts. Part 1 is the non-calculator part of the form. Parts 2 and 3 each have approximately half of the remaining items. The order of GLCEs in each part is Linking, Core, Extended Core, Future Core, and Field Test. Any CR items appear at the end of each part.

The Released Positions for Base items are numbered consecutively beginning with 1. For Linking Items, the Released Positions are taken from the previous grade's test.

The Extended and Future Core items are spiraled across the 16 forms of the tests, according to the following table.

Number of GLCEs	Each Item Occurs on the Following Number of Forms
6 or 7	2 or 3
8	2
9 to 15	1 or 2
16	1

In the Grade 5 tests, there are 22 Extended GLCEs, so each Grade 5 test form has 2 items that assess Extended GLCEs. (The Core designations of the GLCEs are available in the Mathematics Assessable GLCEs document.)

Items are generally arranged from easiest to most difficult within the test booklets. Item quality is extremely important. In previous assessments, MEAP created a spreadsheet that included the Item Codes, Source (Core, Extended and Future Core), GLCEs and field test statistics of all non-released field-tested items. Next, we computed an “Index” that is the sum of the p-value and point-biserial coefficient. Then, the spreadsheet was sorted by Source, GLCE, and p-value (in descending order). We select the needed number of items per Core GLCE to include an easy, moderate and difficult item, with the stipulation that we want the highest Index values for the items selected. Only if no other items are available in the item bank do we accept an item with an Index less than 0.7.

Within each part of the test, items are grouped by Numbers and Operations, then Algebra, Measurement, Geometry and Data, respectively, from easiest to most difficult within each grouping.

For the Field Test portion of the assessment, there needs to be sufficient items to have enough survive to ensure that a test can be built. Currently, there should be sufficient CR items in the Item Bank so as not to require any Field Testing of CR items for the next several years.

The following table shows the current breakdown of items on each form by type of GLCE.

Breakdown of Mathematics Items by GLCE Type						
Grade	Core	Extended	Future	Linking	Field Test	Total # of Items
3	60	2	1	0	7	70
4	58	4	1	7	8	78
5	60	6	1	8	8	83
6	56	2	1	7	6	72
7	60	3	1	7	7	78
8	55	0	1	13	6	75

Part 1 of each form includes items that must be done without the aid of calculators. The non-calculator GLCEs are listed in the table below.

Non-Calculator GLCEs					
Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
N.ME.02.01	N.ME.03.01	N.ME.04.01 E	N.FL.05.04	N.FL.06.04	N.FL.07.08
N.ME.02.02	N.ME.03.02	N.ME.04.02 E	N.FL.05.06	N.FL.06.09 F	N.FL.07.09
N.ME.02.03	N.ME.03.03 E	N.ME.04.03 E	N.ME.05.08	N.FL.06.10	
N.FL.02.06 E	N.ME.03.05 E	N.ME.04.04 E	N.FL.05.12 F	N.FL.06.12 E	
N.MR.02.07	N.FL.03.06	N.ME.04.05	N.FL.05.13 F		
N.MR.02.08 E	N.FL.03.07	N.MR.04.06 E	N.FL.05.14 F		
N.FL.02.10	N.MR.03.09	N.MR.04.07	N.MR.05.15 E		
N.FL.02.11	N.FL.03.11	N.MR.04.08E	N.MR.05.17 E		
N.ME.02.19		N.ME.04.09	M.UN.05.04		
M.PS.02.02		N.FL.04.10E			
M.PS.02.10		N.FL.04.11			
		N.FL.04.12			
		N.MR.04.19			
		N.MR.04.29 F			
		N.MR.04.37			

Rules

For every form of the MEAP Mathematics test, there are several rules that guide the construction of the form.

- (1) Each form will included one item each for one-fourth of the Extended Core GLCEs.
- (2) Each form will include one item each representing $1/N$ Future Core GLCEs, where N is the number of forms.

- (3) Each form includes a base consisting of three items for each of the Core GLCEs; this base is the same for all forms of the test at a grade level.
- (4) Four Field Test items will be tested for each of the multiple-choice Core GLCEs, with the items spiraled across the N forms
- (5) One Field Test item will be tested for each of the multiple-choice Extended and Future Core GLCEs, with the items spiraled across the N forms.
- (6) All non-calculator items, both base and field test, will be included in Part 1 of each booklet.
- (7) No constructed-response items will be used for Extended or Future Core GLCEs.
- (8) GLCEs requiring constructed-response items will be field-tested once every fourth year, including at least eight different prompts – this will provide enough good items to last for four years.
- (9) All items assessing Core GLCEs at a grade level will be used as Linking Items in the next higher grade’s assessment, with 7 Linking Items appearing on each form of the test. (Note: Depending upon the number of non-calculator GLCEs, it may be necessary to include more Linking Items on a test; the Grade 5 booklets include 8 Linking items, and Grade 8 includes 13 of them.)

Sample Test Map and Test Blueprints

A sample Test Map is shown on the following pages for the Grade 4 Mathematics Assessment, which is typical of all of the Mathematics tests for all except Grade 3 (which has no Linking Items).

Test Blueprints for each grade follow the sample Test Map.

MEAP Grades 3 – 8 Mathematics Test Design – Grade 4, Part 1 (Non-calculator)

Level	Form	Item Code	Calculator	Type	Part	Function	Source	Test Position	Points	GLCE	Key	P-Value	RPB
02	Matrix		No	MC	1	Linking	Core-NC	1	1	N.FL.02.10			
02	Matrix		No	MC	1	Linking	Core-NC	2	1	N.MR.02.07			
02	Matrix		No	MC	1	Linking	Core-NC	3	1	N.ME.02.02			
03	Base		No	MC	1	Base	Core-NC	4	1	N.FL.03.06			
03	Base		No	MC	1	Base	Core-NC	5	1	N.FL.03.06			
03	Base		No	MC	1	Base	Core-NC	6	1	N.FL.03.06			
03	Base		No	MC	1	Base	Core-NC	7	1	N.FL.03.07			
03	Base		No	MC	1	Base	Core-NC	8	1	N.FL.03.07			
03	Base		No	MC	1	Base	Core-NC	9	1	N.FL.03.07			
03	Base		No	MC	1	Base	Core-NC	10	1	N.FL.03.11			
03	Base		No	MC	1	Base	Core-NC	11	1	N.FL.03.11			
03	Base		No	MC	1	Base	Core-NC	12	1	N.FL.03.11			
03	Base		No	MC	1	Base	Core-NC	13	1	N.ME.03.01			
03	Base		No	MC	1	Base	Core-NC	14	1	N.ME.03.01			
03	Base		No	MC	1	Base	Core-NC	15	1	N.ME.03.01			
03	Base		No	MC	1	Base	Core-NC	16	1	N.ME.03.02			
03	Base		No	MC	1	Base	Core-NC	17	1	N.ME.03.02			
03	Base		No	MC	1	Base	Core-NC	18	1	N.ME.03.02			
03	Base		No	MC	1	Base	Core-NC	19	1	N.MR.03.09			
03	Base		No	MC	1	Base	Core-NC	20	1	N.MR.03.09			
03	Base		No	MC	1	Base	Core-NC	21	1	N.MR.03.09			
03	Matrix		No	MC	1	Extended	Extended - NC	22	1	N.ME.03.03			
03	Matrix		No	MC	1	FT	Core-NC	23	0	N.FL.03.06			
03	Matrix		No	MC	1	FT	Core-NC	24	0	N.ME.03.01			

Grade 4 Mathematics, Part 2 (Calculators Allowed)

Level	Form	Item Code	Calculator	Type	Part	Function	Source	Test Position	Points	GLCE	Key	P-Value	RPB
02	Matrix		Yes	MC	2	Linking	Core	26	1	N.MR.02.13			
02	Matrix		Yes	MC	2	Linking	Core	27	1	M.UN.02.07			
03	Base		Yes	MC	2	Base	Core	28	1	N.ME.03.21			
03	Base		Yes	MC	2	Base	Core	29	1	N.ME.03.21			
03	Base		Yes	MC	2	Base	Core	30	1	N.ME.03.21			
03	Base		Yes	MC	2	Base	Core	31	1	M.PS.03.11			
03	Base		Yes	MC	2	Base	Core	32	1	M.PS.03.11			
03	Base		Yes	MC	2	Base	Core	33	1	M.PS.03.11			
03	Base		Yes	MC	2	Base	Core	34	1	G.GS.03.06			
03	Base		Yes	MC	2	Base	Core	35	1	G.GS.03.06			
03	Base		Yes	MC	2	Base	Core	36	1	G.GS.03.06			
03	Base		Yes	MC	2	Base	Core	37	1	D.RE.03.02			
03	Base		Yes	MC	2	Base	Core	38	1	D.RE.03.02			
03	Base		Yes	MC	2	Base	Core	41	1	D.RE.03.03			
03	Base		Yes	MC	2	Base	Core	42	1	D.RE.03.03			
03	Base		Yes	MC	2	Base	Core	43	1	N.ME.03.16			
03	Base		Yes	MC	2	Base	Core	44	1	N.ME.03.16			
03	Base		Yes	MC	2	Base	Core	45	1	N.ME.03.16			
03	Base		Yes	MC	2	Base	Core	46	1	M.UN.03.01			
03	Base		Yes	MC	2	Base	Core	47	1	M.UN.03.01			
03	Base		Yes	MC	2	Base	Core	48	1	M.UN.03.01			
03	Base		Yes	MC	2	Base	Core	49	1	D.RE.03.02			
03	Matrix		Yes	MC	2	FT	Core	49	0	D.RE.03.02			
03	Base		Yes	MC	2	Base	Core	50	1	D.RE.03.03			
03	Matrix		Yes	MC	2	FT	Core	50	0	M.UN.03.01			

Grade 4 Mathematics, Part 3 (Calculators Allowed)

Level	Form	Item Code	Calculator	Type	Part	Function	Source	Test Position	Points	GLCE	Key	P-Value	RPB
02	Matrix		Yes	MC	3	Linking	Core	51	1	N.ME.02.18			
02	Matrix		Yes	MC	3	Linking	Core	52	1	N.MR.02.14			
03	Base		Yes	MC	3	Base	Core	53	1	M.UN.03.02			
03	Base		Yes	MC	3	Base	Core	54	1	M.UN.03.02			
03	Base		Yes	MC	3	Base	Core	55	1	M.UN.03.02			
03	Base		Yes	MC	3	Base	Core	56	1	M.UN.03.05			
03	Base		Yes	MC	3	Base	Core	57	1	M.UN.03.05			
03	Base		Yes	MC	3	Base	Core	58	1	M.UN.03.05			
03	Base		Yes	MC	3	Base	Core	59	1	G.SR.03.05			
03	Base		Yes	MC	3	Base	Core	60	1	G.SR.03.05			
03	Base		Yes	MC	3	Base	Core	61	1	G.SR.03.05			
03	Base		Yes	MC	3	Base	Core	62	1	N.MR.03.10			
03	Base		Yes	MC	3	Base	Core	63	1	N.MR.03.10			
03	Base		Yes	MC	3	Base	Core	64	1	N.MR.03.10			
03	Base		Yes	MC	3	Base	Core	65	1	M.UN.03.03			
03	Base		Yes	MC	3	Base	Core	66	1	M.UN.03.03			
03	Base		Yes	MC	3	Base	Core	67	1	M.UN.03.03			
03	Base		Yes	MC	3	Base	Core	68	1	M.UN.03.04			
03	Base		Yes	MC	3	Base	Core	69	1	M.UN.03.04			
03	Base		Yes	MC	3	Base	Core	70	1	M.UN.03.04			
03	Matrix		Yes	MC	3	Extended	Extended	71	1	N.ME.03.17			
03	Matrix		Yes	MC	3	Future	Future	72	0	N.MR.03.12			
03	Matrix		Yes	MC	3	FT	Core	73	0	G.SR.03.05			
03	Matrix		Yes	MC	3	FT	Core	74	0	N.MR.03.10			
03	Matrix		Yes	MC	3	FT	Extended	75	0	M.UN.03.08			
03	Base		Yes	CR	3	Base	Core-CR	76	4	N.MR.03.15	E		

Third Grade Math Test Design

Fall Operational Tests	GLCEs	Items	Items/ Form
Core (MC)	20	60	60
Core (CR)	0	0	0
Vertical Linking Items	N/A	0	0
Extended Core (MC)	7	7	2
Extended Core (CR)	0	0	0
Future Core (MC)	11	11	1
Future Core (CR)	0	0	0
Replacements (MC)	38	98	7
Replacements (CR)	0	0	0
<i>Total</i>	38	176	70
Forms	16	Points	70

2nd GRADE GLCEs	GLCE Type	Item Type	Scored	FT
			Items	Items
N.ME.02.01	Extended - NC	MC	1	1
N.ME.02.02	Core - NC	MC	3	4
N.ME.02.03	Core - NC	MC	3	4
N.FL.02.06	Extended - NC	MC	1	1
N.MR.02.07	Core - NC	MC	3	4
N.MR.02.08	Extended - NC	MC	1	1
N.MR.02.09	Core	MC	3	4
N.FL.02.10	Core - NC	MC	3	4
N.FL.02.11	Core - NC	MC	3	4
N.MR.02.13	Core	MC	3	4
N.MR.02.14	Core	MC	3	4
N.MR.02.15	Future	MC	1	1
N.MR.02.16	Extended	MC	1	1
N.ME.02.18	Core	MC	3	4
N.ME.02.19	Core - NC	MC	3	4
N.ME.02.20	Core	MC	3	4
N.ME.02.21	Future	MC	1	1
N.ME.02.22	Future	MC	1	1
M.UN.02.01	Core	MC	3	4
M.PS.02.02	Core - NC	MC	3	4
M.UN.02.03	Extended	MC	1	1
M.TE.02.04	Future	MC	1	1
M.UN.02.05	Core	MC	3	4
M.UN.02.06	Core	MC	3	4
M.UN.02.07	Core	MC	3	4
M.PS.02.08	Future	MC	1	1
M.UN.02.09	Extended	MC	1	1
M.PS.02.10	Core - NC	MC	3	4
M.TE.02.11	Core	MC	3	4
G.GS.02.01	Core	MC	3	4
G.GS.02.02	Future	MC	1	1
G.GS.02.04	Extended	MC	1	1
G.SR.02.05	Core	MC	3	4
G.TR.02.06	Future	MC	1	1
G.LO.02.07	Future	MC	1	1
D.RE.02.01	Future	MC	1	1
D.RE.02.02	Future	MC	1	1
D.RE.02.03	Future	MC	1	1

11 Future GLCEs	78	98
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07 Extended GLCEs

20 Core GLCEs

38 Assessable GLCEs

Fourth Grade Math Test Design

Fall Operational Tests	GLCEs	Items	Items/ Form
Core (MC)	19	57	57
Core (CR)	1	1	1
Vertical Linking Items	20	60	7
Extended Core (MC)	15	15	4
Extended Core (CR)	0	0	0
Future Core (MC)	6	6	1
Future Core (CR)	0	0	0
Replacements (MC)	40	97	7
Replacements (CR)	1	2	1
<i>Total</i>	41	238	78
Forms	16	Points	84

3rd GRADE GLCEs	GLCE Type	Item Type	Scored	FT
			Items	Items
N.ME.03.01	Core - NC	MC	3	4
N.ME.03.02	Core - NC	MC	3	4
N.ME.03.03	Extended - NC	MC	1	1
N.ME.03.05	Extended - NC	MC	1	1
N.FL.03.06	Core - NC	MC	3	4
N.FL.03.07	Core - NC	MC	3	4
N.MR.03.09	Core - NC	MC	3	4
N.MR.03.10	Core	MC	3	4
N.FL.03.11	Core - NC	MC	3	4
N.MR.03.12	Future	MC	1	1
N.MR.03.14	Future	MC	1	1
N.MR.03.15	Core CR	CR	1	2
N.ME.03.16	Core	MC	3	4
N.ME.03.17	Extended	MC	1	1
N.ME.03.18	Future	MC	1	1
N.ME.03.19	Extended	MC	1	1
N.MR.03.20	Extended	MC	1	1
N.ME.03.21	Core	MC	3	4
M.UN.03.01	Core	MC	3	4
M.UN.03.02	Core	MC	3	4
M.UN.03.03	Core	MC	3	4
M.UN.03.04	Core	MC	3	4
M.UN.03.05	Core	MC	3	4
M.UN.03.06	Extended	MC	1	1
M.UN.03.07	Extended	MC	1	1
M.UN.03.08	Extended	MC	1	1
M.TE.03.09	Future	MC	1	1
M.PS.03.10	Future	MC	1	1
M.PS.03.11	Core	MC	3	4
M.PS.03.12	Extended	MC	1	1
M.PS.03.13	Extended	MC	1	1
G.GS.03.01	Extended	MC	1	1
G.GS.03.02	Future	MC	1	1
G.GS.03.03	Extended	MC	1	1
G.GS.03.04	Extended	MC	1	1
G.SR.03.05	Core	MC	3	4
G.GS.03.06	Core	MC	3	4
G.SR.03.07	Extended	MC	1	1
D.RE.03.01	Extended	MC	1	1
D.RE.03.02	Core	MC	3	4
D.RE.03.03	Core	MC	3	4

06 Future GLCEs

15 Extended GLCEs

20 Core GLCEs

41 Assessable GLCEs

Fifth Grade Math Test Design

Fall Operational Tests	GLCEs	Items	Items/ Form
Core (MC)	20	60	60
Core (CR)	0	0	0
Vertical Linking Items	20	58	8
Extended Core (MC)	22	22	6
Extended Core (CR)	0	0	0
Future Core (MC)	12	12	1
Future Core (CR)	0	0	0
Replacements (MC)	54	114	8
Replacements (CR)	0	0	0
<i>Total</i>	54	266	83
Forms	16	Points	83

4th GRADE GLCEs	GLCE Type	Item Type	Scored FT	
			Items	Items
N.ME.04.01	Extended - NC	MC	1	1
N.ME.04.02	Extended - NC	MC	1	1
N.ME.04.03	Extended - NC	MC	1	1
N.ME.04.04	Extended - NC	MC	1	1
N.ME.04.05	Core - NC	MC	3	4
N.MR.04.06	Extended - NC	MC	1	1
N.MR.04.07	Core - NC	MC	3	4
N.FL.04.08	Extended - NC	MC	1	1
N.ME.04.09	Core - NC	MC	3	4
N.FL.04.10	Extended - NC	MC	1	1
N.FL.04.11	Core - NC	MC	3	4
N.FL.04.12	Core - NC	MC	3	4
N.MR.04.13	Future	MC	1	1
N.MR.04.14	Extended	MC	1	1
N.ME.04.15	Core	MC	3	4
N.ME.04.16	Future	MC	1	1
N.ME.04.17	Extended	MC	1	1
N.ME.04.18	Extended	MC	1	1
N.MR.04.19	Core - NC	MC	3	4
N.ME.04.20	Extended	MC	1	1
N.MR.04.21	Extended	MC	1	1
N.MR.04.22	Core	MC	3	4
N.MR.04.23	Extended	MC	1	1
N.ME.04.24	Future	MC	1	1
N.MR.04.25	Extended	MC	1	1
N.MR.04.26	Extended	MC	1	1
N.MR.04.27	Future	MC	1	1
N.MR.04.28	Future	MC	1	1
N.MR.04.29	Future - NC	MC	1	1
N.MR.04.30	Future	MC	1	1
N.MR.04.31	Future	MC	1	1
N.FL.04.32	Future	MC	1	1
N.FL.04.33	Future	MC	1	1
N.FL.04.34	Extended	MC	1	1
N.FL.04.35	Core	MC	3	4
N.MR.04.37	Core - NC	MC	3	4
M.UN.04.01	Core	MC	3	4
M.PS.04.02	Core	MC	3	4
M.UN.04.03	Core	MC	3	4
M.TE.04.05	Extended	MC	1	1
M.TE.04.06	Core	MC	3	4
M.TE.04.07	Core	MC	3	4
M.TE.04.08	Extended	MC	1	1
M.PS.04.09	Future	MC	1	1
M.TE.04.10	Extended	MC	1	1
M.PS.04.11	Future	MC	1	1
G.GS.04.01	Extended	MC	1	1
G.GS.04.02	Core	MC	3	4
G.SR.04.03	Core	MC	3	4
G.TR.04.04	Extended	MC	1	1
G.TR.04.05	Core	MC	3	4
D.RE.04.01	Extended	MC	1	1
D.RE.04.02	Core	MC	3	4
D.RE.04.03	Core	MC	3	4
12 Future GLCEs			94	114
22 Extended GLCEs				
20 Core GLCEs				
54 Assessable GLCEs				

Sixth Grade Math Test Design

Fall Operational Tests	GLCEs	Items	Items/ Form
Core (MC)	18	54	54
Core (CR)	2	2	2
Vertical Linking Items	20	60	7
Extended Core (MC)	7	7	2
Extended Core (CR)	0	0	0
Future Core (MC)	14	14	1
Future Core (CR)	0	0	0
Replacements (MC)	39	93	6
Replacements (CR)	2	4	1
<i>Total</i>	41	234	73
Forms	16	Points	82

5th GRADE GLCEs	GLCE Type	Item Type	Scored Items	FT Items
N.MR.05.01	Core	MC	3	4
N.MR.05.02	Core	MC	3	4
N.MR.05.03	Extended	MC	1	1
N.FL.05.04	Core - NC	MC	3	4
N.FL.05.05	Core	MC	3	4
N.FL.05.06	Core - NC	MC	3	4
N.MR.05.07	Future	MC	1	1
N.ME.05.08	Core - NC	MC	3	4
N.ME.05.09	Core	MC	3	4
N.ME.05.10	Future	MC	1	1
N.ME.05.11	Future	MC	1	1
N.ME.05.12	Future - NC	MC	1	1
N.MR.05.13	Future - NC	MC	1	1
N.FL.05.14	Future - NC	MC	1	1
N.MR.05.15	Extended - NC	MC	1	1
N.MR.05.17	Extended - NC	MC	1	1
N.FL.05.18	Core CR	CR	1	2
N.MR.05.19	Future	MC	1	1
N.FL.05.20	Core	MC	3	4
N.MR.05.21	Future	MC	1	1
N.MR.05.22	Core	MC	3	4
N.ME.05.23	Extended	MC	1	1
M.UN.05.01	Future	MC	3	4
M.UN.05.02	Extended	MC	1	1
M.UN.05.03	Extended	MC	1	1
M.UN.05.04	Core - NC	MC	3	4
M.PS.05.05	Core	MC	3	4
M.TE.05.06	Core	MC	3	4
M.TE.05.07	Core	MC	3	4
M.PS.05.10	Future	MC	1	1
G.TR.05.01	Extended	MC	1	1
G.GS.05.02	Core	MC	3	4
G.GS.05.03	Future	MC	1	1
G.GS.05.04	Future	MC	1	1
G.GS.05.05	Core	MC	3	4
G.GS.05.06	Core	MC	3	4
G.GS.05.07	Future	MC	1	1
D.RE.05.01	Core	MC	3	4
D.RE.05.02	Core CR	CR	1	2
D.AN.05.03	Core	MC	3	4
D.AN.05.04	Future	MC	1	1
14 Future GLCEs			79	100
07 Extended GLCEs				
20 Core GLCEs				
41 Assessable GLCEs				

Seventh Grade Math Test Design

Fall Operational Tests	GLCEs	Items	Items/ Form
Core (MC)	20	60	60
Core (CR)	0	0	0
Vertical Linking Items	20	56	7
Extended Core (MC)	10	10	3
Extended Core (CR)	0	0	0
Future Core (MC)	13	13	1
Future Core (CR)	0	0	0
Replacements (MC)	43	103	7
Replacements (CR)	0	0	0
<i>Total</i>	43	242	78
Forms	16	Points	78

6th GRADE GLCEs	GLCE Type	Item Type	Scored Items	FT Items
N.MR.06.01	Core	MC	3	4
N.FL.06.02	Core	MC	3	4
N.MR.06.03	Future	MC	1	1
N.FL.06.04	Core - NC	MC	3	4
N.ME.06.05	Extended	MC	1	1
N.ME.06.06	Extended	MC	1	1
N.ME.06.07	Future	MC	1	1
N.MR.06.08	Future	MC	1	1
N.FL.06.09	Future - NC	MC	1	1
N.FL.06.10	Core - NC	MC	3	4
N.ME.06.11	Core	MC	3	4
N.FL.06.12	Extended - NC	MC	1	1
N.FL.06.13	Core	MC	3	4
N.FL.06.14	Core	MC	3	4
N.FL.06.15	Core	MC	3	4
N.ME.06.16	Future	MC	1	1
N.ME.06.17	Core	MC	3	4
N.ME.06.18	Extended	MC	1	1
N.ME.06.19	Extended	MC	1	1
N.ME.06.20	Extended	MC	1	1
A.PA.06.01	Core	MC	3	4
A.RP.06.02	Core	MC	3	4
A.FO.06.03	Core	MC	3	4
A.FO.06.04	Extended	MC	1	1
A.FO.06.05	Future	MC	1	1
A.FO.06.06	Core	MC	3	4
A.FO.06.07	Future	MC	1	1
A.RP.06.08	Extended	MC	1	1
A.PA.06.09	Future	MC	1	1
A.RP.06.10	Future	MC	1	1
A.FO.06.11	Core	MC	3	4
A.FO.06.12	Core	MC	3	4
A.FO.06.13	Core	MC	3	4
A.FO.06.14	Future	MC	1	1
M.UN.06.01	Core	MC	3	4
M.PS.06.02	Future	MC	1	1
M.TE.06.03	Future	MC	1	1
G.GS.06.01	Future	MC	1	1
G.GS.06.02	Core	MC	3	4
G.TR.06.03	Core	MC	3	4
G.TR.06.04	Extended	MC	1	1
D.PR.06.01	Core	MC	3	4
D.PR.06.02	Extended	MC	1	1

13 Future GLCEs

83 103

10 Extended GLCEs

20 Core GLCEs

43 Assessable GLCEs

Eighth Grade Math Test Design

Fall Operational Tests	GLCEs	Items	Items/ Form
Core (MC)	18	54	54
Core (CR)	1	1	1
Vertical Linking Items	20	60	13
Extended Core (MC)	0	0	0
Extended Core (CR)	0	0	0
Future Core (MC)	13	13	1
Future Core (CR)	0	0	0
Replacements (MC)	31	85	6
Replacements (CR)	1	2	1
<i>Total</i>	32	215	76
Forms	16	Points	82

7th GRADE GLCEs	GLCE Type	Item Type	Scored	FT
			Items	Items
N.MR.07.02	Future	MC	1	1
N.FL.07.03	Core	MC	3	4
N.MR.07.04	Core	MC	3	4
N.FL.07.05	Core	MC	3	4
N.MR.07.06	Core	MC	3	4
N.FL.07.07	Core	MC	3	4
N.FL.07.08	Core - NC	MC	3	4
N.FL.07.09	Core - NC	MC	3	4
A.PA.07.01	Future	MC	1	1
A.RP.07.02	Core	MC	3	4
A.PA.07.03	Future	MC	1	1
A.PA.07.04	Core	MC	3	4
A.PA.07.05	Future	MC	1	1
A.PA.07.06	Future	MC	1	1
A.PA.07.07	Future	MC	1	1
A.FO.07.08	Future	MC	1	1
A.PA.07.09	Future	MC	1	1
A.RP.07.10	Future	MC	1	1
A.PA.07.11	Core	MC	3	4
A.FO.07.12	Core	MC	3	4
A.FO.07.13	Future	MC	3	4
G.SR.07.01	Core CR	CR	1	2
G.TR.07.03	Core	MC	3	4
G.TR.07.04	Core	MC	3	4
G.TR.07.05	Core	MC	3	4
G.TR.07.06	Core	MC	3	4
D.RE.07.01	Core	MC	3	4
D.AN.07.02	Future	MC	1	1
D.AN.07.03	Core	MC	3	4
D.AN.07.04	Core	MC	3	4
13 Future GLCEs			68	88
00 Extended Core GLCEs				
18 Core GLCEs				
31 Assessable GLCEs				

MEAP Elementary School Science Test Design

Parameters:

- The Elementary School Science Test has 43 operational items: 39 multiple choice (MC) and 4 constructed response (CR)
- Each MC item is worth 1 point; each CR item is worth 3 points. As such, the test has 51 points: 39 MC points and 12 CR points.
- Among the 43 operational items, an additional 8 FT items (7 MC and 1 CR) bring the test booklet item total to 51. The FT items are not scored.

Limitations:

- Approximately 30% of the test points (within a range of 14 to 16 points) from Strand I
- Approximately 10% of the test points (within a range of 4 to 6 points) from Strand II
- Approximately 20% of the test points (within a range of 9 to 11 points) from each of Strands III, IV and V

Rules:

- The test is divided into parts, Part 1 and Part 2. Each part spans content across the 5 strands for the elementary school section of the Michigan Science Curriculum Framework (Summer, 2000; http://michigan.gov/documents/Updated_Science_Benchmarks_27030_7.pdf).
- Each part has approximately the same amount of work.
- Each part has 4 sections.
 - Part 1 is ordered in Life, Physical, Integrated, and Earth sections.
 - Part 2 is ordered in Earth, Physical, Integrated, and Life sections.
- Any Strand I or Strand II MC item, **not** included in the Integrated section, is placed in the subject section that matches the theme of the item's prompt. A Strand I or Strand II MC item that has a general science theme (a theme applicable to any or all subject areas) is placed in the Integrated section.
- All cluster item sets and free standing CR items are placed in the integrated sections.
- All items in the Life, Physical, and Earth sections are MC.
- The MC items within a section are placed in benchmark order (e.g., III.1.e.1, III.2.e.3, III.5.e.4) within a given part of the test.
- Any Strand I or Strand II MC items placed within a subject section are placed in order to the benchmark domain as exhibited in the theme of the item's prompt. For example, a Strand I MC item, having a prompt with a "Forces in Motion" theme, would be placed where IV.3.e.* falls into the test's section.

Note: A cluster set consists of 3 MC items and 1 CR item. The CR item must align with either Strand I or Strand II. At least 2 of the 3 MC items must have different subject strand combinations (i.e., III and IV, or III and V, or IV and V)

Approval Process:

The items selected for the elementary school science test must be approved by the MEAP science consultant prior to any test booklet preparation. This approval includes:

- any and all final test edits for both content, composition, and format
- review and approval of item benchmark codes and answer key
- the order of item placement in the test.

The approval process will review the selected test items as presented to the MEAP science consultant as a stack of pages having 1 item per page along with the item's metadata (e.g., benchmark, key, and statistics). For distinction, the FT items would use paper other than white. The order of the pages in the stack will reflect the proposed item order on the test.

OEAA Elementary School Science MEAP Test Specifications

Strand	Multiple Choice Items	Constructed Response Items/points	Total items/points
I. Constructing New Scientific Information	Min. 2 Exp. 6 Max. 10	2 to 4 items for 6, 9, 12 pts (prefer 9 pts)	6 to 12 items for 14 to 16 pts
II. Reflecting on Scientific Information	Min. 0 Exp. 3 Max. 6	0 to 2 items for 3, 6 pts (prefer 3 pts)	2 to 4 items for 4 to 6 pts
III. Using Life Science	Min. 9 Exp. 10 Max. 11	0	9 to 11
IV. Using Physical Science	Min. 9 Exp. 10 Max. 11	0	9 to 11
V. Using Earth Science	Min. 9 Exp. 10 Max. 11	0	9 to 11
Total points/items	39 items	4 items/12 points	39 MC items and 4 CR
Field test items (12 forms; items matrixed through)	7	1	7 MC items and 1 CR
Total operational and FT items/points	46 items	5 items for 15 pts	46 MC items and 5 CR

Elementary School Science Test Template – Part 1

Item #	Function	Type	Strand	Points	Section
1	Base	MC	I, II or III	1	Life
2	Base	MC	I, II or III	1	Life
3	FT	MC	I, II or III	N/A	Life
4	Base	MC	I, II or III	1	Life
5	Base	MC	I, II or III	1	Life
6	Base	MC	I, II or III	1	Life
7	Base	MC	I, II or IV	1	Physical
8	FT	MC	I, II or IV	N/A	Physical
9	Base	MC	I, II or IV	1	Physical
10	Base	MC	I, II or IV	1	Physical
11	Base	MC	I, II or IV	1	Physical
12	Base	MC	I, II or IV	1	Physical
13	FT	MC	I, II, III, IV, V	N/A	Integrated
14	Base	CR	I or II	3	Integrated
15	Base	CR	I or II	3	Integrated
16	Base	MC – cluster	I, II, III, IV, V	1	Integrated
17	Base	MC – cluster	I, II, III, IV, V	1	Integrated
18	Base	MC – cluster	I, II, III, IV, V	1	Integrated
19	Base	CR – cluster	I or II	3	Integrated
20	Base	MC	I, II or V	1	Earth
21	Base	MC	I, II or V	1	Earth
22	FT	MC	I, II or V	N/A	Earth
23	Base	MC	I, II or V	1	Earth
24	Base	MC	I, II or V	1	Earth
25	Base	MC	I, II or V	1	Earth

Note: It is best to populate the test layout with the cluster sets first, since these sets contribute to the Life, Physical and Earth benchmarks. The numbers of independent MC items needed to meet test specifications will determine the relative sizes of a subject section within parts of the test.

Elementary School Science Test Template – Part 2

Item #	Function	Type	Strand	Points	Section
26	Base	MC	I, II or V	1	Earth
27	Base	MC	I, II or V	1	Earth
28	Base	MC	I, II or V	1	Earth
29	Base	MC	I, II or V	1	Earth
30	Base	MC	I, II or V	1	Earth
31	Base	MC	I, II or V	1	Earth
32	Base	MC	I, II or IV	1	Physical
33	Base	MC	I, II or IV	1	Physical
34	Base	MC	I, II or IV	1	Physical
35	Base	MC	I, II or IV	1	Physical
36	Base	MC	I, II or IV	1	Physical
37	Base	MC	I, II or IV	1	Physical
38	Base	MC – cluster	I, II, III, IV, V	1	Integrated
39	Base	MC – cluster	I, II, III, IV, V	1	Integrated
40	Base	MC – cluster	I, II, III, IV, V	1	Integrated
41	Base	CR – cluster	I or II	3	Integrated
42	FT	MC	I, II, III, IV, V	N/A	Integrated
43	FT	MC	I, II, III, IV, V	N/A	Integrated
44	FT	MC	I, II, III, IV, V	N/A	Integrated
45	FT	CR	I or II	N/A	Integrated
42	FT	MC – cluster	I, II, III, IV, V	N/A	Integrated
43	FT	MC – cluster	I, II, III, IV, V	N/A	Integrated
44	FT	MC – cluster	I, II, III, IV, V	N/A	Integrated
45	FT	CR – cluster	I or II	N/A	Integrated
46	Base	MC	I, II, or III	1	Life
47	Base	MC	I, II, or III	1	Life
48	Base	MC	I, II, or III	1	Life
49	Base	MC	I, II, or III	1	Life
50	Base	MC	I, II, or III	1	Life
51	Base	MC	I, II, or III	1	Life

Note, the FT section within the Integrated section of Part 2 will **either** present a cluster set of items or 3 independent MC items and a free standing CR.

Elementary School MSCF Benchmark Coverage Winter & Fall '05

Strand I		Benchmark					
Domain		1	2	3	4	5	6
1		1	9	1	3	1	2
Strand II		Benchmark					
Domain		1	2	3	4	5	
2		0	2	0	5	1	
Strand III		Benchmark					
Domain		1	2	3	4	5	
1							
2		3	0	5	1	3	
3		1					
4		0	2				
5		5	0	2	1		
Strand IV		Benchmark					
Domain		1	2	3	4	5	6
1		0	0	1	0	0	
2		1	1				
3		3	4	0	1	2	
4		1	3	2	2		
Strand V		Benchmark					
Domain		1	2	3	4	5	6
1		1	0	5	1	0	1
2		2	0	0			
3		1	0	0			
4		4	2				

MEAP Middle School Science Test Design

Parameters:

- The Middle School Science Test has 50 operational items: 46 multiple choice (MC) and 4 constructed response (CR)
- Each MC item is worth 1 point; each CR item is worth 3 points. As such, the test has 58 points: 46 MC points and 12 CR points.
- Among the 50 operational items, an additional 8 FT items (7 MC and 1 CR) bring the test booklet item total to 58. The FT items are not scored.

Limitations:

- Approximately 25% of the test points (within a range of 13 to 15 points) from Strand I
- Approximately 15% of the test points (within a range of 8 to 10 points) from Strand II
- Approximately 20% of the test points (within a range of 10 to 12 points) from each of Strands III, IV and V

Rules:

- The test is divided into parts, Part 1 and Part 2. Each part spans content across the 5 strands for the middle school section of the Michigan Science Curriculum Framework (Summer, 2000; http://michigan.gov/documents/Updated_Science_Benchmarks_27030_7.pdf).
- Each part has approximately the same amount of work.
- Each part has 4 sections.
 - Part 1 is ordered in Life, Physical, Integrated, and Earth sections.
 - Part 2 is ordered in Earth, Physical, Integrated, and Life sections.
- Any Strand I or Strand II MC item, **not** included in the Integrated section, is placed in the subject section that matches the theme of the item's prompt. A Strand I or Strand II MC item that has a general science theme (a theme applicable to any or all subject areas) is placed in the Integrated section.
- All cluster item sets and free standing CR items are placed in the integrated sections.
- All items in the Life, Physical, and Earth sections are MC.
- The MC items within a section are placed in benchmark order (e.g., III.1.m.1, III.2.m.3, III.5.m.4) within a given part of the test.
- Any Strand I or Strand II MC items placed within a subject section are placed in order to the benchmark domain as exhibited in the theme of the item's prompt. For example, a Strand I MC item, having a prompt with a "Forces in Motion" theme, would be placed where IV.3.m.* falls into the test's section.

Note: A cluster set consists of 3 MC items and 1 CR item. The CR item must align with either Strand I or Strand II. At least 2 of the 3 MC items must have different subject strand combinations (i.e., III and IV, or III and V, or IV and V)

Approval Process:

The items selected for the middle school science test must be approved by the MEAP science consultant prior to any test booklet preparation. This approval includes:

- any and all final test edits for both content, composition, and format
- review and approval of item benchmark codes and answer key
- the order of item placement in the test.

The approval process will review the selected test items as presented to the MEAP science consultant as a stack of pages having 1 item per page along with the item's metadata (e.g., benchmark, key, and statistics). For distinction, the FT items would use paper other than white. The order of the pages in the stack will reflect the proposed item order on the test.

OEAA Middle School Science MEAP Test Specifications

Strand	Multiple Choice Items	Constructed Response Items/points	Total items/points
I. Constructing New Scientific Information	Min. 1 Exp. 5 Max. 9	2 to 4 items for 6, 9, 12 pts (prefer 9 pts)	5 to 15 items for 13 to 15 pts
II. Reflecting on Scientific Information	Min. 2 Exp. 6 Max. 10	0 to 2 items for 3, 6 pts (prefer 3 pts)	2 to 4 items for 8 to 10 pts
III. Using Life Science	Min. 10 Exp. 11 Max. 12	0	10 to 12
IV. Using Physical Science	Min. 10 Exp. 11 Max. 12	0	10 to 12
V. Using Earth Science	Min. 10 Exp. 11 Max. 12	0	10 to 12
Total points/items	46 items	4 items/12 points	46 MC items and 4 CR
Field test items (12 forms; items matrixed through)	7	1	7 MC items and 1 CR
Total operational and FT items/points	53 items	5 items for 15 pts	53 MC items and 5 CR

Middle School Science Test Template – Part 1

Item #	Function	Type	Strand	Points	Section
1	Base	MC	I, II or III	1	Life
2	Base	MC	I, II or III	1	Life
3	FT	MC	I, II or III	N/A	Life
4	Base	MC	I, II or III	1	Life
5	Base	MC	I, II or III	1	Life
6	Base	MC	I, II or III	1	Life
7	Base	MC	I, II or III	1	Life
8	Base	MC	I, II or IV	1	Physical
9	Base	MC	I, II or IV	1	Physical
10	Base	MC	I, II or IV	1	Physical
11	FT	MC	I, II or IV	N/A	Physical
12	Base	MC	I, II or IV	1	Physical
13	Base	MC	I, II or IV	1	Physical
14	Base	MC	I, II or IV	1	Physical
15	FT	MC	I, II, III, IV, V	N/A	Integrated
16	Base	CR	I or II	3	Integrated
17	Base	CR	I or II	3	Integrated
18	Base	MC – cluster	I, II, III, IV, V	1	Integrated
19	Base	MC – cluster	I, II, III, IV, V	1	Integrated
20	Base	MC – cluster	I, II, III, IV, V	1	Integrated
21	Base	CR – cluster	I or II	3	Integrated
22	Base	MC	I, II or V	1	Earth
23	Base	MC	I, II or V	1	Earth
24	Base	MC	I, II or V	1	Earth
25	Base	MC	I, II or V	1	Earth
26	Base	MC	I, II or V	1	Earth
27	FT	MC	I, II or V	N/A	Earth
28	Base	MC	I, II or V	1	Earth

Note: It is best to populate the test layout with the cluster sets first, since these sets contribute to the Life, Physical and Earth benchmarks. The numbers of independent MC items needed to meet test specifications will determine the relative sizes of a subject section within parts of the test.

Middle School Science Test Template – Part 2

Item #	Function	Type	Strand	Points	Section
29	Base	MC	I, II or V	1	Earth
30	Base	MC	I, II or V	1	Earth
31	Base	MC	I, II or V	1	Earth
32	Base	MC	I, II or V	1	Earth
33	Base	MC	I, II or V	1	Earth
34	Base	MC	I, II or V	1	Earth
35	Base	MC	I, II or V	1	Earth
36	Base	MC	I, II or IV	1	Physical
37	Base	MC	I, II or IV	1	Physical
38	Base	MC	I, II or IV	1	Physical
39	Base	MC	I, II or IV	1	Physical
40	Base	MC	I, II or IV	1	Physical
41	Base	MC	I, II or IV	1	Physical
42	Base	MC	I, II or IV	1	Physical
43	Base	MC – cluster	I, II, III, IV, V	1	Integrated
44	Base	MC – cluster	I, II, III, IV, V	1	Integrated
45	Base	MC – cluster	I, II, III, IV, V	1	Integrated
46	Base	CR – cluster	I or II	3	Integrated
47	Base	MC	I, II, III, IV, V	1	Integrated
48	FT	MC	I, II, III, IV, V	N/A	Integrated
49	FT	MC	I, II, III, IV, V	N/A	Integrated
50	FT	MC	I, II, III, IV, V	N/A	Integrated
51	FT	CR	I or II	N/A	Integrated
48	FT	MC – cluster	I, II, III, IV, V	N/A	Integrated
49	FT	MC – cluster	I, II, III, IV, V	N/A	Integrated
50	FT	MC – cluster	I, II, III, IV, V	N/A	Integrated
51	FT	CR – cluster	I or II	N/A	Integrated
52	Base	MC	I, II, or III	1	Life
53	Base	MC	I, II, or III	1	Life
54	Base	MC	I, II, or III	1	Life
55	Base	MC	I, II, or III	1	Life
56	Base	MC	I, II, or III	1	Life
57	Base	MC	I, II, or III	1	Life
58	Base	MC	I, II, or III	1	Life

Note, the FT section within the Integrated section of Part 2 will **either** present a cluster set of items or 3 independent MC items and a free standing CR.

Middle School MSCF Benchmark Coverage Winter & Fall '05

Strand I	Benchmark					
Domain	1	2	3	4	5	6
1	0	3	4	1	10	0

Strand II	Benchmark					
Domain	1	2	3	4	5	6
2	3	0	0	1	4	2

Strand III	Benchmark					
Domain	1	2	3	4	5	6
1	0	0				
2	1	1	3	1		
3	0	3				
4	0	4				
5	5	3	3			

Strand IV	Benchmark					
Domain	1	2	3	4	5	6
1	2	2	2	3	1	1
2	1	0	1	1		
3	1	4	1	0	0	
4	1	1	1	3	0	0

Strand V	Benchmark					
Domain	1	2	3	4	5	6
1	0	2	4	1	1	
2	0	2	3	0		
3	1	0	1	0		
4	1	3	1			

MEAP Elementary School Social Studies Test Design

Parameters:

- The Elementary School Social Studies Test has 47 operational items: 46 multiple choice (MC) and 1 constructed response (CR)
- Each MC item is worth 1 point; the CR item is worth 3 points. As such, the test has 49 points: 46 MC points and 3 CR points.
- In addition to the 47 operational items, there will be 11 MC and 1 CR Field Test items. The FT items do not count toward the student's score.

Limitations:

- Ten MC items each (20% of the total points) from Strands I, II, III and IV
- Six MC items (12% of the total points) from Strand V
- One CR item (6% of the total points) from Strand VI

Rules:

- The test is divided into parts, Part 1 and Part 2. Each part spans across the 6 strands for the elementary school section of the Michigan Social Studies Curriculum Framework (Summer, 2000; http://michigan.gov/documents/Updated_Social_Studies_Benchmarks_27030_7.pdf).
- Each part has approximately the same amount of work.
- Each part has 5 sections. Example:
 - Part 1 assesses History, Economics, Civics, and Inquiry.
 - Part 2 assesses Geography, Inquiry, Civics, and History
 - Public Discourse and Decision Making is assessed in either Part 1 or Part 2.
- MC items are grouped together either by Strand or by a Theme (e.g., The Revolutionary War).
- Order of Strands or Themes within each Part is flexible – could change from one year to the next
- Clusters of items, related to a common Prompt, may be used where appropriate and/or necessary to achieve clarity and integrity.

Approval Process:

The items selected for the elementary school Social Studies test must be approved by the MEAP Social Studies consultant prior to any test booklet preparation. This approval includes:

- any and all final test edits for both content, composition, and format
- review and approval of item benchmark codes and answer key
- the order of item placement in the test.

The approval process will review the selected test items as presented to the MEAP Social Studies consultant as a stack of pages having 1 item per page along with the item's metadata (e.g., benchmark, key, and statistics). For distinction, the FT items would use paper other than white. The order of the pages in the stack will reflect the proposed item order on the test.

OEAA Elementary School Social Studies MEAP Test Specifications

Strand	Multiple Choice Items	Constructed Response Items/points	Total items/points
History	10		10
Geography	10		10
Civics/ government	10		10
Economics	10		10
Inquiry	5		5
Inquiry and Decision Making	1	3 points	3 points
Total points/items	46	1 item 3 pts	47 items 49 points
Field test items (12 forms; items matrixed through)	11 MC items and 1 CR	N/A	11 MC items and 1 CR

Elementary School Social Studies Test Template – Part 1

Item #	Function	Type	Strand	Points	Section
1	Base	MC	II	1	Geography
2	Base	MC	II	1	Geography
3	Base	MC	II	1	Geography
4	Base	MC	II	1	Geography
5	Base	MC	II	1	Geography
6	FT	MC	I, II, III, IV or V	N/A	As Needed
7	FT	MC	I, II, III, IV or V	N/A	As Needed
8	FT	MC	I, II, III, IV or V	N/A	As Needed
9	FT	MC	I, II, III, IV or V	N/A	As Needed
10	FT	MC	I, II, III, IV or V	N/A	As Needed
11	Base	MC	IV	1	Economics
12	Base	MC	IV	1	Economics
13	Base	MC	IV	1	Economics
14	Base	MC	IV	1	Economics
15	Base	MC	IV	1	Economics
16	Base	MC	III	1	Civics
17	Base	MC	III	1	Civics
18	Base	MC	III	1	Civics
19	Base	MC	III	1	Civics
20	Base	MC	III	1	Civics
21	Base	MC	I	1	History
22	Base	MC	I	1	History
23	Base	MC	I	1	History
24	Base	MC	I	1	History
25	Base	MC	I	1	History
26	Base	MC – Cluster	V	1	Inquiry
27	Base	CR – Cluster	VI	3	Decision-Making

Note: It is best to populate the test layout with the cluster sets first. The numbers of independent MC items needed to meet test specifications will determine the relative sizes of a subject section within parts of the test. The position of the FT items within each Part can vary, so that test administrators and students cannot predict which section is Field Test.

Elementary School Social Studies Test Template – Part 2

Item #	Function	Type	Strand	Points	Section
28	Base	MC	II	1	Geography
29	Base	MC	II	1	Geography
30	Base	MC	II	1	Geography
31	Base	MC	II	1	Geography
32	Base	MC	II	1	Geography
33	Base	MC – Cluster	V	1	Inquiry
34	Base	MC – Cluster	V	1	Inquiry
35	Base	MC – Cluster	V	1	Inquiry
36	Base	MC – Cluster	V	1	Inquiry
37	Base	MC – Cluster	V	1	Inquiry
38	Base	MC	III	1	Civics
39	Base	MC	III	1	Civics
40	Base	MC	III	1	Civics
41	Base	MC	III	1	Civics
42	Base	MC	III	1	Civics
43	FT	MC	I, II, III, IV or V	N/A	As Needed
44	FT	MC	I, II, III, IV or V	N/A	As Needed
45	FT	MC	I, II, III, IV or V	N/A	As Needed
46	FT	MC	I, II, III, IV or V	N/A	As Needed
47	FT	MC	I, II, III, IV or V	N/A	As Needed
48	Base	MC	I	1	History
49	Base	MC	I	1	History
50	Base	MC	I	1	History
51	Base	MC	I	1	History
52	Base	MC	I	1	History
53	Base	MC	IV	1	Economics
54	Base	MC	IV	1	Economics
55	Base	MC	IV	1	Economics
56	Base	MC	IV	1	Economics
57	Base	MC	IV	1	Economics
58	FT	MC – Cluster	V	N/A	Inquiry
59	FT	CR – Cluster	VI	N/A	Decision-Making

Note, Items 26 and 27, as well as 58 and 59, are clusters related to a specific data set. The 5 Items relating to Strand V are clusters related to a specific data set, also. At this level, the data set consists of two relatively simple maps, charts and/or tables.

Elementary School MCF Benchmark Coverage Winter & Fall '05

I. History Standard	Benchmark			
	1	2	3	4
1	1	1	2	
2	2	5	2	1
3	1	1	0	
4	0	4		

II. Geography Standard	Benchmark					
	1	2	3	4	5	6
1	0	0	1			
2	1	1	3	2		
3	1	3	1	3		
4	0	1	0	0	0	2
5	1					

III. Civics Standard	Benchmark			
	1	2	3	4
1	5	2	0	
2	0	1	1	
3	0	2		
4	1	2	1	3
5	1	1		

IV. Economics Standard	Benchmark			
	1	2	3	4
1	0	2	1	1
2	1	3	0	
3	0	2	1	
4	1	4	0	
5	0	1	0	

V. Inquiry Standard	Benchmark			
	1	2	3	4
1	0	0	12	
2	0	0	0	0

VI. Decision making Standard	Benchmark		
	1	2	3
1	0	0	0
2	0		
3	2		

MEAP Middle School Social Studies Test Design

Parameters:

- The Middle School Social Studies Test has 47 operational items: 46 multiple choice (MC) and 1 constructed response (CR)
- Each MC item is worth 1 point; the CR item is worth 4 points. As such, the test has 50 points: 46 MC points and 4 CR points.
- In addition to the 47 operational items, there will be 11 MC and 1 CR Field Test items. The FT items do not count toward the student's score.

Limitations:

- Ten MC items each (20% of the total points) from Strands I, II, III and IV
- Six MC items (12% of the total points) from Strand V
- One CR item (8% of the total points) from Strand VI

Rules:

- The test is divided into parts, Part 1 and Part 2. Each part spans across the 6 strands for the middle school section of the Michigan Social Studies Curriculum Framework (Summer, 2000; http://michigan.gov/documents/Updated_Social_Studies_Benchmarks_27030_7.pdf).
- Each part has approximately the same amount of work.
- Each part has 5 sections.
 - Part 1 assesses History, Economics, Civics, and Inquiry.
 - Part 2 assesses Geography, Inquiry, Civics, and History
 - Public Discourse and Decision Making is assessed in either Part 1 or Part 2.
- MC items are grouped together either by Strand or by a Theme (e.g., The Civil War).
- Order of Strands or Themes within each Part is flexible – could change from one year to the next
- Clusters of items, related to a common Prompt, may be used where appropriate and/or necessary to achieve clarity and integrity.

Approval Process:

The items selected for the Middle school Social Studies test must be approved by the MEAP Social Studies consultant prior to any test booklet preparation. This approval includes:

- any and all final test edits for both content, composition, and format
- review and approval of item benchmark codes and answer key
- the order of item placement in the test.

The approval process will review the selected test items as presented to the MEAP Social Studies consultant as a stack of pages having 1 item per page along with the item's metadata (e.g., benchmark, key, and statistics). For distinction, the FT items would use paper other than white. The order of the pages in the stack will reflect the proposed item order on the test.

OEAA Middle School Social Studies MEAP Test Specifications

Strand	Multiple Choice Items	Constructed Response Items/points	Total items/points
History	10		10
Geography	10		10
Civics/ government	10		10
Economics	10		10
Inquiry	5		5
Inquiry and Decision Making	1	1 item 4 points	1 item 4 points
Total points/items	46	1 item 4 points	47 items 50 points
Field test items (12 forms; items matrixed through)	11 MC items and 1 CR	N/A	11 MC items and 1 CR

Middle School Social Studies Test Template – Part 1

Item #	Function	Type	Strand	Points	Section
1	Base	MC	IV	1	Economics
2	Base	MC	IV	1	Economics
3	Base	MC	IV	1	Economics
4	Base	MC	IV	1	Economics
5	Base	MC	IV	1	Economics
6	FT	MC	I, II, III, IV or V	N/A	As Needed
7	FT	MC	I, II, III, IV or V	N/A	As Needed
8	FT	MC	I, II, III, IV or V	N/A	As Needed
9	FT	MC	I, II, III, IV or V	N/A	As Needed
10	FT	MC	I, II, III, IV or V	N/A	As Needed
11	Base	MC	II	1	Geography
12	Base	MC	II	1	Geography
13	Base	MC	II	1	Geography
14	Base	MC	II	1	Geography
15	Base	MC	II	1	Geography
16	Base	MC	III	1	Civics
17	Base	MC	III	1	Civics
18	Base	MC	III	1	Civics
19	Base	MC	III	1	Civics
20	Base	MC	III	1	Civics
21	Base	MC	I	1	History
22	Base	MC	I	1	History
23	Base	MC	I	1	History
24	Base	MC	I	1	History
25	Base	MC	I	1	History
26	Base	MC – Cluster	V	1	Inquiry
27	Base	CR – Cluster	VI	3	Decision-Making

Note: It is best to populate the test layout with the cluster sets first. The numbers of independent MC items needed to meet test specifications will determine the relative sizes of a subject section within parts of the test. The position of the FT items within each Part can vary, so that test administrators and students cannot predict which section is Field Test.

Middle School Social Studies Test Template – Part 2

Item #	Function	Type	Strand	Points	Section
28	Base	MC	II	1	Geography
29	Base	MC	II	1	Geography
30	Base	MC	II	1	Geography
31	Base	MC	II	1	Geography
32	Base	MC	II	1	Geography
33	Base	MC – Cluster	III	1	Civics
34	Base	MC – Cluster	III	1	Civics
35	Base	MC – Cluster	III	1	Civics
36	Base	MC – Cluster	III	1	Civics
37	Base	MC – Cluster	III	1	Civics
38	Base	MC	I	1	History
39	Base	MC	I	1	History
40	Base	MC	I	1	History
41	Base	MC	I	1	History
42	Base	MC	I	1	History
43	FT	MC	I, II, III, IV or V	N/A	As Needed
44	FT	MC	I, II, III, IV or V	N/A	As Needed
45	FT	MC	I, II, III, IV or V	N/A	As Needed
46	FT	MC	I, II, III, IV or V	N/A	As Needed
47	FT	MC	I, II, III, IV or V	N/A	As Needed
48	Base	MC	IV	1	Economics
49	Base	MC	IV	1	Economics
50	Base	MC	IV	1	Economics
51	Base	MC	IV	1	Economics
52	Base	MC	IV	1	Economics
53	Base	MC	V	1	Inquiry
54	Base	MC	V	1	Inquiry
55	Base	MC	V	1	Inquiry
56	Base	MC	V	1	Inquiry
57	Base	MC	V	1	Inquiry
58	FT	MC – Cluster	V	N/A	Inquiry
59	FT	CR – Cluster	VI	N/A	Decision-Making

Note, Items 26 and 27, as well as 58 and 59, are clusters related to a specific data set. The 5 Items relating to Strand V are clusters related to a specific data set, also. At this level, the data set consists of two moderately complex maps, charts, and/or tables.

Middle School MCF Benchmark Coverage Winter & Fall '05

I. History

Standard	Benchmark			
	1	2	3	4
1	0	4	0	
2	3	1	1	1
3	1	0	2	2
4	5	0	0	0

II. Geography

Standard	Benchmark				
	1	2	3	4	5
1	0	0	1		
2	2	0	0	2	0
3	2	0	1	4	
4	0	1	8	1	
5	0	0	0		

III. Civics

Standard	Benchmark			
	1	2	3	4
1	4	0	1	0
2	1	2	2	
3	3	2	1	
4	0	1		
5	0	1		

IV. Economics

Standard	Benchmark			
	1	2	3	4
1	5	1	0	
2	6	0	3	1
3	0	0	0	0
4	1	0	2	
5	0	1	0	

V. Inquiry

Standard	Benchmark			
	1	2	3	4
1	0	0	12	
2	0	0	0	0

VI. Decision Making

Standard	Benchmark		
	1	2	3
1	0	0	0
2	0		
3	2		
4	0	0	

MEAP English Language Arts Test Design for Grades 3-8

The MEAP English Language Arts Assessment is based on the Michigan Grade Level Content Expectations (GLCEs), which have been categorized as Core or Not Assessed at the State Level (NASL). Each form of the assessment includes a pair of related texts along with independent items and cross-text items. There are also independent texts and a student writing sample, each with a set of multiple choice items.

Students write a response to the paired texts (which is part of the reading assessment) and to the student writing sample and a “Writing from Knowledge and Experience” prompt (which are part of the writing assessment).

The Core designations of the GLCEs are available in the English Language Arts Assessable GLCEs document.

For the Field Test portion of the assessment, there need to be sufficient items to have enough survive to ensure that a test can be built. The ELA assessment consists of up to five parts (including an optional Listening Assessment at Grades 4 and 7). The field test portion makes up Part 3 of each form.

Because the field test portions have several unique designs, it is necessary to have four different answer folder layouts, which in turn necessitates different item numbering for Parts 4 and 5 of the test forms. This is illustrated in the pages that follow.

Part 1A: Paired Reading Selections – Two paired texts, each followed by 8 independent multiple choice items with 5 cross-text multiple-choice items at the end
Part 1B: Response to the Paired Reading Selections – Student writes a short essay about the paired texts
Part 2: Reading – Independent Reading Selections – One independent selection, accompanied by 8 multiple choice items; in Grades 4-8, Part 2 also includes a linking passage from the previous grade's assessment. One linking passage appears in Forms 1-8; a second linking passage appears in Forms 9-14; the third linking passage appears in Forms 15-20. Part 3: Field Test – Requires 4 Different Answer Folder Layouts
Part 3: Field test – Varies by form (see pages 4 and 5 below)
Part 4A: Writing from Knowledge and Experience – Student writes an extended essay about a topic
Part 4B: Student Writing Sample – Student reads a student-written piece, answers 5 multiple-choice Revising and Editing items, and writes a short response
Part 5: Optional Listening Assessment (Grades 4 & 7 only) – Student listens to a story, taking notes while doing so, and responds to 10 multiple-choice items

The first step in form development is to select the cross-text pairing (Part 1A). Because of the limited number of words permitted in the passages (see page 2 below), the length of these passages will place limits on the lengths of the remaining passages. In the test design, it is necessary to include both narrative and informational texts in as balanced a number as possible. Since the base form has three on-grade-level texts (a cross-text pair, plus an independent passage), there must be at least one informational text and one narrative text among these three texts.

In Grade 3, there are three answer choices per item. In Grades 4-8, there are four answer choices per item, with the exception of the linking items on the Grade 4 assessment, which will have the three answer choices contained in the Grade 3 assessment. The Grade 4 answer folders should offer only three grid positions for these linking items.

MEAP ELA Tests Blueprint: Test Layout	Grade 3 Points	Grades 4-8 Points
Part 1, Section 1: Cross-text Pairing and Related MC Items		
Passage 1: 8 independent MC items	8	8
Passage 2: 8 independent MC items	8	8
Cross-Text: 5 cross-text items	5	5
Word Study: 1-4 MC items (included in independent items in section 1 or 2)		
Part 1, Section 2: Cross-text - Response to the Readings (6 points)	6	6
Part 2: Independent Reading Passages and Related MC Items		
Passage 1: 8 independent MC items	8	8
Passage 2: 8 independent MC linking items (Grades 4 and up)		8
Part 3: Embedded Field Test		
Part 3: Embedded Field Test (content varies by form, four formats--see below)	0	0
Part 4, Section 1: Writing from Knowledge & Experience	6	6
Part 4, Section 2a: 5 Writing MC Items	5	5
Part 4, Section 2b: Peer Response	4	4
Reading Points	35	43
Writing Points	15	15
Total Points	50	58
MEAP ELA Tests Blueprint: Item Totals	Grade 3 Items	Grades 4-8 Items
Informational Items (actual will vary)		
Narrative Items (actual will vary)		
Comprehension & Critical Standards Items (actual will vary)		
Word Study Items (actual will vary)		
Cross-Text Items (included in informational, narrative and comprehension)		
Written Response to the Readings	1	1
Extended Essay: Writing from Knowledge & Experience	1	1
5 Revising and Editing MC Items	5	5
Short Essay: Peer Response	1	1
Total ELA Items	37	45
Field Test Answer Folder Formats		
Answer Folder for Forms 1-8: 12 MC items		
Answer Folder for Forms 11-16: 6 MC and 1 Response to Reading		
Answer Folder for Forms 17-20: 4 MC and 1 Peer Response to Student Writing Sample		
Answer Folder for Forms 9-10: 1 Writing from Knowledge & Experience		
Blueprint: Word Limits		
Grade 3: 2,150		
Grade 4: 2,250		
Grade 5: 2,600		
Grade 6: 3,000		
Grade 7: 3,250		
Grade 8: 3,500		

Grade 5 Base Test Layout (same for all of Grades 4-8)

Subject	Level	Form	Item Code	Passage/Prompt	Type	Part	Function	Source	Test Position
ELA	4	0		Passage 1	MC	1A	Base	Core	1
ELA	4	0		Passage 1	MC	1A	Base	Core	2
ELA	4	0		Passage 1	MC	1A	Base	Core	3
ELA	4	0		Passage 1	MC	1A	Base	Core	4
ELA	4	0		Passage 1	MC	1A	Base	Core	5
ELA	4	0		Passage 1	MC	1A	Base	Core	6
ELA	4	0		Passage 1	MC	1A	Base	Core	7
ELA	4	0		Passage 1	MC	1A	Base	Core	8
ELA	4	0		Passage 2	MC	1A	Base	Core	9
ELA	4	0		Passage 2	MC	1A	Base	Core	10
ELA	4	0		Passage 2	MC	1A	Base	Core	11
ELA	4	0		Passage 2	MC	1A	Base	Core	12
ELA	4	0		Passage 2	MC	1A	Base	Core	13
ELA	4	0		Passage 2	MC	1A	Base	Core	14
ELA	4	0		Passage 2	MC	1A	Base	Core	15
ELA	4	0		Passage 2	MC	1A	Base	Core	16
ELA	4	0		Passage 1/Passage 2	MC	1A	Base	Core	17
ELA	4	0		Passage 1/Passage 2	MC	1A	Base	Core	18
ELA	4	0		Passage 1/Passage 2	MC	1A	Base	Core	19
ELA	4	0		Passage 1/Passage 2	MC	1A	Base	Core	20
ELA	4	0		Passage 1/Passage 2	MC	1A	Base	Core	21
ELA	4	0		Response to Reading	CR	1B	Base	Core	22
ELA	4	0		Independent Passage 1	MC	2	Base	Core	23
ELA	4	0		Independent Passage 1	MC	2	Base	Core	24
ELA	4	0		Independent Passage 1	MC	2	Base	Core	25
ELA	4	0		Independent Passage 1	MC	2	Base	Core	26
ELA	4	0		Independent Passage 1	MC	2	Base	Core	27
ELA	4	0		Independent Passage 1	MC	2	Base	Core	28
ELA	4	0		Independent Passage 1	MC	2	Base	Core	29
ELA	4	0		Independent Passage 1	MC	2	Base	Core	30
ELA	3			Independent Linking Passage	MC	2	Linking	Core	31
ELA	3			Independent Linking Passage	MC	2	Linking	Core	32
ELA	3			Independent Linking Passage	MC	2	Linking	Core	33
ELA	3			Independent Linking Passage	MC	2	Linking	Core	34
ELA	3			Independent Linking Passage	MC	2	Linking	Core	35
ELA	3			Independent Linking Passage	MC	2	Linking	Core	36
ELA	3			Independent Linking Passage	MC	2	Linking	Core	37
ELA	3			Independent Linking Passage	MC	2	Linking	Core	38
Field Test Section									
ELA	4	0		Writing from Knowledge and Experience	CR	4A	Base	Core	**
ELA	4	0		Writing MC	MC	4B	Base	Core	**
ELA	4	0		Writing MC	MC	4B	Base	Core	**
ELA	4	0		Writing MC	MC	4B	Base	Core	**
ELA	4	0		Writing MC	MC	4B	Base	Core	**
ELA	4	0		Writing MC	MC	4B	Base	Core	**
ELA	4	0		Response to Peer Sample	CR	4B	Base	Core	**

Grade 3 has a similar design, except that there are no linking passages.

** The item numbering in Part 4 will depend upon the form, since the Field Test section (Part 3) varies from form to form.

Field Test Section Layouts – Forms 1 - 10

Forms 1-8: Allows for testing 8 independent passages

Subject	Level	Form	Item Code	Passage/Prompt	Type	Part	Function	Source	Test Position
ELA	**	1-8		Independent Passage	MC	3	FT	Core	39
ELA	**	1-8		Independent Passage	MC	3	FT	Core	40
ELA	**	1-8		Independent Passage	MC	3	FT	Core	41
ELA	**	1-8		Independent Passage	MC	3	FT	Core	42
ELA	**	1-8		Independent Passage	MC	3	FT	Core	43
ELA	**	1-8		Independent Passage	MC	3	FT	Core	44
ELA	**	1-8		Independent Passage	MC	3	FT	Core	45
ELA	**	1-8		Independent Passage	MC	3	FT	Core	46
ELA	**	1-8		Independent Passage	MC	3	FT	Core	47
ELA	**	1-8		Independent Passage	MC	3	FT	Core	48
ELA	**	1-8		Independent Passage	MC	3	FT	Core	49
ELA	**	1-8		Independent Passage	MC	3	FT	Core	50

Would potentially yield:

8 Independent Passages with 12 items apiece

Forms 9-10: Allows for testing 2 Writing from Knowledge and Experience prompts

Subject	Level	Form	Item Code	Passage/Prompt	Type	Part	Function	Source	Test Position
ELA	**	9-10		Writing from Knowledge & Experience	CR	3	FT	Core	39

Would potentially yield:

2 Writing from Knowledge and Experience prompts

Field Test Section Layouts – Forms 11 - 20

Forms 11-16: Allows 3 Cross-Text Pairs to be Field-Tested

Subject	Level	Form	Item Code	Passage/Prompt	Type	Part	Function	Source	Test Position
ELA	**	11-16		P1/P2 Cross	MC	3A	FT	Core	39
ELA	**	11-16		P1/P2 Cross	MC	3A	FT	Core	40
ELA	**	11-16		P1/P2 Cross	MC	3A	FT	Core	41
ELA	**	11-16		P1/P2 Cross	MC	3A	FT	Core	42
ELA	**	11-16		P1/P2 Cross	MC	3A	FT	Core	43
ELA	**	11-16		P1/P2 Cross	MC	3A	FT	Core	44
ELA	**	11-16		Response to Reading	CR	3B	FT	Core	45

Would potentially yield:

3 Cross-Text Pairings with:

Up to 2 Response to Reading prompts for each pair

Up to 12 cross-text MC items for each pairing

Forms 17-20: Allows for testing 2 Peer Writing Samples

Subject	Level	Form	Item Code	Passage/Prompt	Type	Part	Function	Source	Test Position
ELA	**	17-20		Peer Writing Sample	MC	3	FT	Core	39
ELA	**	17-20		Peer Writing Sample	MC	3	FT	Core	40
ELA	**	17-20		Peer Writing Sample	MC	3	FT	Core	41
ELA	**	17-20		Peer Writing Sample	MC	3	FT	Core	42
ELA	**	17-20		Peer Response to Student Writing Sample Prompt	CR	3	FT	Core	43

Would potentially yield:

8 MC writing items per Peer Sample

4 Peer Response to the Student Writing Sample Prompts